

Freshwater Fisheries Monthly Report – July 2021

Stock Assessment

North Branch Potomac River - A mark and recapture study was conducted on the Westernport to Black Oak section of the river. Through cooperative efforts over many days with fisheries staff and local fishing guides, fish were given an adipose fin clip to mark individuals that would later be recaptured to determine a population estimate for the river. Trout species collected during the float were: brook trout, rainbow trout, brown trout, and tiger trout.



*A trophy North Branch Potomac River brown trout
(Photo by John Mullican)*

Deep Creek - Pressed and read scales removed from northern pike during the sampling efforts that took place in early spring on Deep Creek Lake. Life history information of Deep Creek's pike population will be recorded and analyzed to help with future management decisions.

Completed reading all otoliths removed from walleye that were collected from Deep Creek Lake. Data collected from otoliths will help to determine productivity, growth, mortality, length at age, and age at maturity.

Smallmouth Bass Survey - Started the annual smallmouth bass young-of-year (YOY) seine surveys. The Monocacy River had an average of 0.9 fish/seine haul, slightly below the long-term average of 1.5 fish/seine haul. The Conococheague River had an average of 1.4 fish/seine haul, also below the long-term average of 2.1 fish/seine haul. Sites are currently being sampled on the mainstem Potomac River from Seneca upstream to Little Orleans. Unfortunately, multiple smallmouth bass YOY have been observed with skin lesions. Roughly 30 percent of the juvenile smallmouth bass collected in some areas had external lesions present. These samples have been preserved and sent to researchers at the U.S. Geological Survey (USGS) Eastern Ecological Science Center for additional fish health testing.



Upper Potomac River smallmouth bass exhibiting external skin lesions

Beaver Creek Trout Survey - Conducted annual trout electrofishing surveys on Beaver Creek in Washington County. Trout densities are good with signs of decent juvenile reproduction. The majority of the adult fish were in the 7-10 inch size range. The largest brown trout collected measured just under 17 inches.



Adult brown trout from Beaver Creek, Washington County

Trout Surveys - Following the standard operating procedure (SOP) for trout management, July temperatures prevented field work in central region trout streams from being conducted nearly every day with air temperatures in the mid-nineties and heat indexes above 100 degrees. Surveys are not conducted during these conditions to prevent stress on trout.

Attempted to obtain landowner permission to electrofish the headwaters of Gladden Branch and a tributary to Broad Creek in Harford County. Contact information was left hoping to gain access to these properties to determine if trout populations are present or if the potential to establish them exists due to favorable environmental conditions.

Qualitative Electrofishing Survey - Conducted a 1,200-second qualitative electrofishing survey in an unnamed tributary to Little Gunpowder Falls in Harford County. Seven adult brook trout and one YOY brook trout were collected during the survey.

Habitat and Water Quality

Environmental Review - Provided aquatic resource information for the following environmental review projects:

- An application by Maryland Department of the Environment - Abandoned Mine Land Division for a lime doser to be placed on an unnamed tributary to Jennings Run on Fireclay Mountain Road in Mount Savage, Maryland. Freshwater Fisheries supported the

installation that will result in improving water quality. Recommendations were made for causing minimal disturbance in the floodplain during installation.

- A Maryland Department of Transportation - State Highway Administration application for the replacement of multiple culverts along with road resurfacing on MD Rt. 39 in Oakland Maryland. With the project associated with numerous small tributaries and wetland areas, comments were provided to protect existing aquatic life and avoid altering the integrity of the wetlands.
- An application for the installation of a temporary bridge for a timber harvest near Christie Road SE in Cumberland, Maryland. Comments were directed toward minimizing disturbance during installation and not altering hydrology when removed.
- A review of the stormwater management plans for a large commercial development in Cecil County near Port Deposit. The development of the former U.S. Navy "Bainbridge" property is associated with three coldwater streams which support wild trout populations. Freshwater Fisheries staff is providing fish and water quality data and information to Maryland Department of the Environment and Cecil Soil Conservation. Staff also provided comments on four potential department property acquisitions, and a large dam removal project in Kent County.

Land Stewardship

- Provided comments on the South Mountain Inn property located in Washington County for Project Open Space.
- Participated in a Land Reclamation Committee meeting held at the Bureau of Mines office in Frostburg, Maryland. Revegetation approval for reclaimed mines was discussed as well as the approval of a vegetation change for a future mine reclamation.

Stocking and Population Management

Rainbow Trout - The Youghiogheny River catch-and-release area was stocked with 4,500 juvenile rainbow trout; fish were 15 fish/pound and were raised at Mettiki Hatchery.

Largemouth Bass - Stocked 2,500 largemouth bass juveniles into Piscataway Creek (Prince George's County), a tributary of the Potomac River. Fish were produced and raised at the department's Manning Hatchery (Charles County) from Potomac River brood, and should continue to support and maintain that fishery.

Stocking Permits - Issued 18 pond stocking permits.

Outreach

Provided customer service information for inquiries regarding:

- Deep Creek Lake
- Fishing licenses
- Casselman River fishing advice
- Personal flotation device (PFD) regulations for the Potomac River
- Contact for the process of having a beaver dam removed from a stream
- Regulations for the use of cast nets in state waters
- Resources, access and fishing advice for the North Branch Potomac River
- Results of North Branch Potomac River zero creel area electrofishing mark - recapture survey (provided summary to the North Branch Potomac River Advisory Committee)
- Maryland freshwater fishing opportunities (discussed with a number of writers at the Mason Dixon Outdoor Writers Association (MDOWA) conference)

Angler Access

Fishery Management Areas (FMAs) - Continuing to monitor and maintain the Evitts Creek, Black Oak, and McCoole FMAs. Trash cleanup and lawn maintenance have been completed.

Signage - Checked and replaced regulation signs as needed at different management areas.

Invasive Species

Central Region followed up on information from a Natural Resource Police that a pond in Eldersburg was “covered up in snakeheads”. The pond drains into Snowdens Run, a tributary to Liberty Reservoir, that once had brook trout until the headwaters were heavily developed in the 1990s. Staff walked the perimeter and electrofished cover along the shoreline but only observed largemouth bass and bluegill sunfish. The pond was full of submerged aquatic vegetation which provided excellent habitat for snakeheads. Another pond in the watershed was also inspected but only bluegill sunfish adults and fry were observed.

Completed work monitoring movements of invasive blue catfish from the oligo- and meso-haline portions of the tidal Patuxent River (Anne Arundel, Calvert, Charles, Prince George’s counties) as part of a collaborative project with the USGS Eastern Ecological Science Center. Data will be analyzed to identify spawning hotspots and movement patterns.

Brook Trout Program

- Assisted Trout Unlimited with monitoring of brook trout populations at two locations in Allegany County: Sand Spring Run and Jennings Run. This work was done as a pre-monitoring assessment that will be used to gauge success of upcoming habitat improvement projects in those streams. Sand Spring Run has undergone riparian buffer restoration on a property just outside of Frostburg and will include the removal of a perched culvert to allow for fish passage. Jennings Run water quality issues will be addressed by the installation of lime dosing devices. Staff will continue to monitor brook trout populations at each location to determine post-restoration conditions.
- Conducted repairs to the real-time water temperature probe monitoring the North Branch Potomac River tailwater trout fishery. The water temperature probe is used by guides and managers to direct coldwater activities and manage the resource.
- Began compiling federal aid reports for Brook Trout Program work conducted under the Federal Sportfish and Restoration Grant.
- Responded to a number of customer service emails and requests regarding brook trout resources in Maryland.
- Provided information to the Garrett County Republican newspaper about recent electrofishing surveys conducted in western Maryland which was published as an article.
- Assisted regional operations by presenting creel survey information at the North Branch Potomac River Advisory Committee meeting.